

Mr. Aaron Wiley
Kemira Chemicals, Inc.
315 North Madison Street
Fortville, Indiana 46040

Re: 059-15284
First Minor Permit Modification to
Part 70 No.: T 059-7362-00009

Dear Mr. Wiley:

Kemira Chemicals, Inc. was issued a Part 70 permit on February 16, 2002 for an inorganic chemical production source. A letter requesting changes to this permit was received on February 1, 2002. Pursuant to the provisions of 326 IAC 2-7-12 a minor permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The changes consist of incorporating the applicable requirements for the following boiler permitted under the Minor Source Modification 059-15477:

- (b) One (1) natural gas-fired low NOx boiler, with a maximum heat input capacity of 12.0 million British thermal units per hour per hour (mmBtu/hr). This boiler will replace the existing 6.0 mmBtu/hr natural gas-fired boiler.

The following applicable requirements shall apply to the above equipment and be numbered Section D.3 in the Part 70 permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (b) One (1) natural gas-fired low NOx boiler, with a maximum heat input capacity of 12.0 million British thermal units per hour per hour (mmBtu/hr). This boiler will replace the existing 6.0 mmBtu/hr natural gas-fired boiler.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating), the particulate matter (PM) emissions from the new 12.0 mmBtu/hr natural gas-fired boiler shall be limited to 0.57 pound per million British thermal units (lb/mmBtu). This PM emissions shall be determined using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where: Pt = Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit, in which case, the capacity specified in the operating permit shall be used.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.2 Record Keeping Requirements [326 IAC 12 and 40 CFR Part 60]

Pursuant to the New Source Performance Standards (NSPS), 326 IAC 12 and 40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, the owner or operator of the new 12.0 mmBtu/hr natural gas-fired boiler is subject to the following:

- (a) Under Subsection (g) § 60.48c, the owner or operator of the boiler shall maintain records of the amounts of fuel combusted during each month.
- (b) Under Subsection (i) § 60.48c, all records required in this Section shall be maintained by the owner or operator of the boiler for a period of two (2) years following the date of such record.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.3 Reporting Requirements [326 IAC 12 and 40 CFR Part 60]

- (a) Pursuant to the New Source Performance Standards (NSPS), 326 IAC 12 and 40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, the owner or operator of the new 12.0 mmBtu/hr natural gas-fired boiler shall submit the following report:

- (1) Commencement of construction date (no later than 30 days after such date);
- (2) Anticipated start-up date (30 days prior to such date);
- (3) Actual start-up date (within 15 days after such days);

The report shall include the following:

- (1) The design heat input capacity of the boiler and identification of the fuel to be combusted; and
 - (2) the annual capacity factor at which the owner or operator anticipates operating the boiler, based on all fuels fired and based on individual fuel fired.
- (b) A certification, signed by the responsible official, that certifies all of the fuels combusted during the period. The natural gas-fired boiler certification does require the certification by the responsible official as defined by 326 IAC 2-7-1(34).
 - (c) The natural gas boiler certification shall be submitted to the address listed in Section C - General Reporting Requirements, of the Part 70 permit, using the reporting forms

located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Aida De Guzman, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for Aida De Guzman or extension (3-4972), or dial (317) 233-4972.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

APD

cc: File - Hancock County
U.S. EPA, Region V
Hancock County Health Department
Air Compliance Section Inspector - D.J. Knotts
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Kemira Chemicals, Inc.
315 North Madison Street
Fortville, Indiana 46040**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T 059-7362-00009	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: February 16, 2000
First Minor Permit Modification No.: 059-15284	Pages Affected: 4, 5, 29, 30, 31 Pages Added: 31a, 31b, 31c
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Chief Permit Branch Office of Air Quality	Issuance Date: April 22, 2002

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates an inorganic chemical production source.

Responsible Official: Christopher W. Conti
Source Address: 315 N. Madison Street, Fortville, Indiana 46040
Mailing Address: 315 N. Madison Street, Fortville, Indiana 46040
Phone Number: 317-485-5117
SIC Code: 2819
County Location: Hancock
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) natural gas-fired sodium silicate furnace, known as EU-02, consisting of four (4) burners installed in 1962, modified to four (4) burners in 1994, exhausted to stack 002, capacity: 3.33 tons of sodium silicate per hour, rated at 37.8 million British thermal units per hour, total.
- (b) One (1) natural gas-fired low NO_x boiler, with a maximum heat input capacity of 12.0 million British Thermal Units per hour (mmBtu/hr). This boiler will replace the existing 6.0 mmBtu/hr natural gas-fired boiler.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) One (1) sand storage silo and one (1) soda ash storage silo, collectively known as EU-01, installed in 1962, capacity: 150 tons of sand and 140 tons of soda ash, respectively, throughput capacity: 2.56 tons of sand per hour and 1.49 tons of soda ash per hour, respectively. (326 IAC 6-3-2)
- (b) Four (4) sodium silicate adjusting tanks, known as tanks #1 through tank #4, installed in 1962, capacity: 23,200 pounds of sodium silicate solution per batch, maximum of twelve (12) batches per day (11,600 pounds per hour), total. (326 IAC 6-3-2)
- (c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. (326 IAC 8-3)

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] - Insignificant Activities

- (a) One (1) sand storage silo and one (1) soda ash storage silo, collectively known as EU-01, installed in 1962, capacity: 150 tons of sand and 140 tons of soda ash, respectively, throughput capacity: 2.56 tons of sand per hour and 1.49 tons of soda ash per hour, respectively. (326 IAC 6-3-2)
- (b) Four (4) sodium silicate adjusting tanks, known as tanks #1 through tank #4, installed in 1962, capacity: 23,200 pounds of sodium silicate solution per batch, maximum of twelve (12) batches per day (11,600 pounds per hour), total. (326 IAC 6-3-2)
- (c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. (326 IAC 8-3)

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each of the four (4) adjusting tanks shall not exceed a total of 5.26 pounds per hour when operating at a total process weight rate of 1.45 tons per hour.

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

- (b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the one (1) sand storage silo and one (1) soda ash storage silo, collectively known as EU-01, shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator of the cold cleaner operations constructed after January 1, 1980 and prior to January 1, 1990 shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;

- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.2.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility constructed after January 1, 1990 shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.

- (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
- (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Compliance Determination Requirements

D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing when necessary to determine if these facilities are in compliance. If testing is required by IDEM, compliance with the PM limits specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (b) One (1) natural gas-fired low NO_x boiler, with a maximum heat input capacity of 12.0 million British Thermal Units per hour (mmBtu/hr). This boiler will replace the existing 6.0 mmBtu/hr natural gas-fired boiler.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating), the particulate matter (PM) emissions from the new 12.0 mmBtu/hr natural gas-fired boiler shall be limited to 0.57 pound per million British thermal units (lb/mmBtu). This PM emissions shall be determined using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where: Pt = Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input.
Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit, in which case, the capacity specified in the operating permit shall be used.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.2 Record Keeping Requirements [326 IAC 12 and 40 CFR Part 60]

Pursuant to the New Source Performance Standards (NSPS), 326 IAC 12 and 40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, the owner or operator of the new 12.0 mmBtu/hr natural gas-fired boiler is subject to the following:

- (a) Under Subsection (g) § 60.48c, the owner or operator of the boiler shall maintain records of the amounts of fuel combusted during each month.
- (b) Under Subsection (i) § 60.48c, all records required in this Section shall be maintained by the owner or operator of the boiler for a period of two (2) years following the date of such record.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.3 Reporting Requirements [326 IAC 12 and 40 CFR Part 60]

- (a) Pursuant to the New Source Performance Standards (NSPS), 326 IAC 12 and 40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, the owner or operator of the new 12.0 mmBtu/hr natural gas-fired boiler shall submit the following report:
- (1) Commencement of construction date (no later than 30 days after such date);

(2) Anticipated start-up date (30 days prior to such date);

(3) Actual start-up date (within 15 days after such days);

The report shall include the following:

- (1) The design heat input capacity of the boiler and identification of the fuel to be combusted; and
 - (2) the annual capacity factor at which the owner or operator anticipates operating the boiler, based on all fuels fired and based on individual fuel fired.
- (b) A certification, signed by the responsible official, that certifies all of the fuels combusted during the period. The natural gas-fired boiler certification does require the certification by the responsible official as defined by 326 IAC 2-7-1(34).
- (c) The natural gas boiler certification shall be submitted to the address listed in Section C - General Reporting Requirements, of the Part 70 permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: Kemira Chemicals, Inc.
Source Address: 315 North Madison St., Fortville, Indiana 46040
Mailing Address: 315 North Madison St., Fortville, Indiana 46040
First Minor Source Modification: 059-15477
Part 70 Permit No.: 059-7362-00009

9	Natural Gas Only
9	Alternate Fuel burned
From: _____	To: _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Minor Part 70 Permit Modification

Source Background and Description

Source Name:	Vinings Industries, Inc.
Source Location:	315 North Madison St., Fortville, Indiana 46040
County:	Hancock
SIC Code:	2819
Operation Permit No.:	T059-7362-00009
Operation Permit Issuance Date:	February 16, 2002
First Minor Permit Modification No.:	059-15284-00009
Permit Reviewer:	Aida De Guzman

The Office of Air Quality (OAQ) has reviewed a permit modification application from Vinings Industries, Inc., an inorganic chemical manufacturing source relating to the operation of the following boiler permitted under the Minor Source Modification 059-15477-00009.

- (b) One (1) natural gas-fired low NO_x boiler, with a maximum heat input capacity of 12.0 million British Thermal Units per hour (mmBtu/hr). This boiler will replace the existing 6.0 mmBtu/hr natural gas-fired boiler.

Existing Approvals

The source was issued a Part 70 Operating Permit (T059-7362-00009) on February 16, 2000. The source has the following permits pending for approval:

- (a) Re-opening No.: 059-13306, pending for approval; and
- (b) First Minor Source Modification No.: 059-15477, pending for approval.

Recommendation

The staff recommends to the Commissioner that the Minor Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on January 23, 2002, with additional information was received on February 1, 2002.

Emission Calculations

- (a) Natural Gas-Fired Boiler: The emission calculation was determined in the Minor Source Modification 059-15477-00009. This Permit Modification will not result in any change in the emissions.

State Rule Applicability

This permit modification will not result in any change to the state rule applicability already determined. See determination made in the Minor Source Modification 059-15477.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Changes to the Part 70 Permit

The following are the changes to the Part 70 Permit 059-7362, which applies to the new boiler (changes are bolded and deletions are struck-through for emphasis):

- (1) The existing 6.0 mmBtu/hr natural gas-fired boiler was identified as an insignificant activity in Section A.3 of the Part 70 permit. Since the new 12.0 mmBtu/hr natural gas-fired boiler which will replace the existing boiler is not an insignificant activity, the new boiler will be included in Section A.2, and the existing boiler will be deleted in Section A.3 and Section D.2 as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) natural gas-fired sodium silicate furnace, known as EU-02, consisting of four (4) burners installed in 1962, modified to four (4) burners in 1994, exhausted to stack 002, capacity: 3.33 tons of sodium silicate per hour, rated at 37.8 million British thermal units per hour, total.
- (b) **One (1) natural gas-fired low NO_x boiler, with a maximum heat input capacity of 12.0 million British Thermal Units per hour (mmBtu/hr). This boiler will replace the existing 6.0 mmBtu/hr natural gas-fired boiler.**

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) ~~Natural gas-fired boiler, rated at 6.0 millions of British thermal units per hour. (326 IAC~~

6-2)

- (b- a) One (1) sand storage silo and one (1) soda ash storage silo, collectively known as EU-01, installed in 1962, capacity: 150 tons of sand and 140 tons of soda ash, respectively, throughput capacity: 2.56 tons of sand per hour and 1.49 tons of soda ash per hour, respectively. (326 IAC 6-3-2)
- ⊗b) Four (4) sodium silicate adjusting tanks, known as tanks #1 through tank #4, installed in 1962, capacity: 23,200 pounds of sodium silicate solution per batch, maximum of twelve (12) batches per day (11,600 pounds per hour), total. (326 IAC 6-3-2)
- (d c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. (326 IAC 8-3)

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] - Insignificant Activities

- (a) ~~Natural gas-fired boiler, rated at 6.0 millions of British thermal units per hour. (326 IAC 6-2)~~
- (b a) One (1) sand storage silo and one (1) soda ash storage silo, collectively known as EU-01, installed in 1962, capacity: 150 tons of sand and 140 tons of soda ash, respectively, throughput capacity: 2.56 tons of sand per hour and 1.49 tons of soda ash per hour, respectively. (326 IAC 6-3-2)
- (e b) Four (4) sodium silicate adjusting tanks, known as tanks #1 through tank #4, installed in 1962, capacity: 23,200 pounds of sodium silicate solution per batch, maximum of twelve (12) batches per day (11,600 pounds per hour), total. (326 IAC 6-3-2)
- (d c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. (326 IAC 8-3)

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 No changes

~~D.2.2 Particulate Matter Limitation (PM) [326 IAC 6-2]~~

~~Pursuant to 326 IAC 6-2-3 (d) (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1 (b)), particulate emissions from the natural gas-fired boiler which was existing and in operation on or before June 8, 1972, shall in no case exceed 0.8 pounds of particulate matter per million British thermal units heat input.~~

~~D.2.3 Sulfur Dioxide (SO₂) [326 IAC 7-1]~~

~~The portion of condition 4 of OP-30-01-92-0068, issued on June 24, 1988 that limited SO₂ emissions from the boiler to 6 pounds per million British thermal units of heat input was not incorporated into this permit because the boiler can no longer burn any fuel except for natural gas and therefore pursuant to 326 IAC 7-1 this limit no longer applies.~~

~~D.2.4~~ **2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]**

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator of the cold cleaner operations constructed after January 1, 1980 and prior to January 1, 1990 shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.2.53 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility constructed after January 1, 1990 shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Compliance Determination Requirements

D.2.6 4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing when necessary to determine if these facilities are in compliance. If testing is required by IDEM, compliance with the PM limits specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

- (2) The following Section will be added in the part 70 permit that applies to the new 12.0 mmBtu/hr boiler:

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (b) One (1) natural gas-fired low NOx boiler, with a maximum heat input capacity of 12.0 million British Thermal Units per hour (mmBtu/hr). This boiler will replace the existing 6.0 mmBtu/hr natural gas-fired boiler.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating), the particulate matter (PM) emissions from the new 12.0 mmBtu/hr natural gas-fired boiler shall be limited to 0.57 pound per million British thermal units (lb/mmBtu). This PM emissions shall be determined using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where: Pt = Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input.
Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit, in which case, the capacity specified in the operating permit shall be used.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.2 Record Keeping Requirements [326 IAC 12 and 40 CFR Part 60]

Pursuant to the New Source Performance Standards (NSPS), 326 IAC 12 and 40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, the owner or operator of the new 12.0 mmBtu/hr natural gas-fired boiler is subject to the following:

- (a) Under Subsection (g) § 60.48c, the owner or operator of the boiler shall maintain records of the amounts of fuel combusted during each month.
- (b) Under Subsection (i) § 60.48c, all records required in this Section shall be maintained by the owner or operator of the boiler for a period of two (2) years following the date of such record.

- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.3 Reporting Requirements [326 IAC 12 and 40 CFR Part 60]

- (a) Pursuant to the New Source Performance Standards (NSPS), 326 IAC 12 and 40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, the owner or operator of the new 12.0 mmBtu/hr natural gas-fired boiler shall submit the following report:

- (1) Commencement of construction date (no later than 30 days after such date);
- (2) Anticipated start-up date (30 days prior to such date);
- (3) Actual start-up date (within 15 days after such days);

The report shall include the following:

- (1) The design heat input capacity of the boiler and identification of the fuel to be combusted; and
 - (2) the annual capacity factor at which the owner or operator anticipates operating the boiler, based on all fuels fired and based on individual fuel fired.
- (b) A certification, signed by the responsible official, that certifies all of the fuels combusted during the period. The natural gas-fired boiler certification does require the certification by the responsible official as defined by 326 IAC 2-7-1(34).
- (c) The natural gas boiler certification shall be submitted to the address listed in Section C - General Reporting Requirements, of the Part 70 permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported.

Conclusion

The operation of this boiler shall be subject to the conditions of the attached **Minor Permit Modification No. 059-15284**.